

United States Department of Agriculture,

DIVISION OF ENTOMOLOGY.

THE PERIODICAL CICADA IN 1898.

The periodical cicada, popularly known as the "locust" or the "seventeen-year locust," is expected to appear the present year at many places of the country. The nature and natural history of this insect and its appearance at long regular intervals—17 years in the more northern, and 13 years in the more southern regions—are now generally understood. It suffices to repeat here that the periodical cicada should not be confounded with the destructive locust or grasshopper of the West, and further that it does not injure field crops although appearing in enormous numbers in the timbered sections of the country. The only damage done by it consists in puncturing the young sprigs of orchard and forest trees. Old orchards remote from forests or situated in the immediate vicinity of large cities are much less molested in this way, while young orchards on newly cleared land or situated in the vicinity of timber lands are liable to suffer. The damage to forest trees is more apparent than real, and amounts only to a general pruning of the younger twigs.

Two different broods of the cicada will make their simultaneous appearance this year: a 17-year brood at various places from Wisconsin in the west to New York in the east, commencing to appear about the last week of May; and a 13-year brood on both sides of the Mississippi River from near the mouth of the Missouri to southern Louisiana, commencing to appear toward the end of April.

The following is a list of the localities, arranged alphabetically according to States and counties, from which the cicada has been reported at former periods.

THIRTEEN-YEAR BROOD VII, 1885-1898.

Arkansas: Counties of Arkansas, Chicot, Columbia, Cross (and adjacent counties), Desha, Franklin, Izard, Jackson, Jefferson, Marion, Mississippi, Phillips, Prairie, Pulaski, Saline (?), Searcy.

Georgia: Counties of Cobb (?), Coweta (?), Dekalb (?), Gwinnett (?), Meriwether (?), Newton (?).

Kentucky: Counties of Barren (?), Graves, Trigg.

Illinois: Counties of Alexander, Jackson, Macoupin, Madison, Perry, Pike, Randolph, Scott, Union, Washington (??).

Indiana: County of Posey (??).

Louisiana: Parishes of Bossier, Caldwell, East Carroll, Franklin, Madison, Morehouse, Red River, Richland, Washington, West Carroll.

Mississippi: Counties of Alcorn, Amite, Bolivar, Calhoun, Carroll, Claiborne, Coahoma, Copiah, De Soto, Franklin, Hinds (and adjoining counties), Issaquena, Jasper, Lafayette, Lawrence, Lincoln, Madison, Marshall, Montgomery, Newton, Panola, Quitman, Rankin (and adjoining counties), Scott, Simpson, Smith, Tate, Tishomingo, Webster.

Missouri: Counties of Audrain, Boone, Cape Girardeau, Christian, Dade, Dallas, Douglas, Gasconade, Greene, Hickory, Jefferson, Johnson, Knox, Lawrence (?), New Madrid, Osage, Pettis, Perry, Polk, St. Charles, St. Louis, Scott, Taney, Texas, Warren, Washington, Webster.

Tennessee: Benton, Carroll, Chester, Crockett, Davidson, Decatur, Dickson, Dyer, Fayette, Gibson, Hardeman, Haywood, Henderson, Humphreys, Lake, Lauderdale, McNairy, Madison, Maury, Obion, Robertson, Shelby, Tipton, Weakley.

Of the various 13-year broods that are recorded, only two are of large extent, Brood VIII (1881-1894-1907) and the present brood. Both occupy the Mississippi Valley from northern Missouri and southern Illinois to Louisiana, but while Brood XVIII occurs also in many other localities throughout the other Southern States as far east as Virginia, the present brood seems to be confined to the Mississippi Valley, with the exception of a detached area in Georgia, which, however, has never been confirmed beyond doubt. In the Annual Report of the U. S. Department of Agriculture the geographical distribution of Brood VII has been discussed and illustrated by a map. Since that year very little additional information has been obtained. The only locality in Indiana (Posey County) rests upon a record received in 1885 and is, in all probability, not correct. There is also a vague report, received in 1885, of the occurrence of this brood in Saint Clair County, Alabama.

SEVENTEEN-YEAR BROOD XVII, 1881-1898.

Illinois: County of Douglas.

Michigan: County of Cass (??).

New Jersey: County of Essex.

New York: Counties of Richmond (Staten Island), Westchester.

North Carolina: Western portion (no specified localities).

Ohio: Counties of Ashtabula, Summit (??), Vinton (??).

Pennsylvania: Counties of Dauphin, Lancaster, Northampton (and adjoining counties), Philadelphia (Germantown), Westmoreland.

Virginia: County of Smyth.

West Virginia: County of Ohio (Wheeling) (??).

Wisconsin: Counties of Columbia, Dane, Green Lake, LaCrosse, Marquette (?), Sauk.

This brood covers a vast area from Wisconsin in the west to New York in the east and along the Alleghany Mountains to North Carolina, but the comparatively few localities on record are more widely scattered and isolated from each other than in any other 17-year brood. It seems more than probable that our knowledge of the extent of the brood is very imperfect, so that nothing can be said at present regarding the relation of this brood to other broods. Of the localities mentioned above, Summit and Vinton counties, Ohio, as well as Ohio County, West Virginia, are probably incorrect, the records being apparently based upon stragglers of Brood XV (1880-1897), which appears always one year before Brood XVII. The reported occurrence of the periodical cicada along the northern slope of the Big Horn Mountains of Montana and Wyoming is probably based upon a confusion with some other species of cicada.

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Approved:

JAMES WILSON,
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WASHINGTON, D. C., *April 1, 1898.*

NOTE.—A knowledge of the exact extent of each swarm or brood of the cicada is of considerable economic importance, and the object of this circular is to invite the correspondents of the Division to send word regarding the appearance of the cicada the present year so that previous records may be confirmed or rejected, and new localities made known.

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